United States Patent and Trademark Office



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS P.O. Box 1450

P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/944,262	07/17/2013	John A. Siemon	SIE0447R	8252
23413 CANTOR COL	7590 08/25/202 .BURN LLP	EXAMINER		
20 Church Stree			LEE, CHRISTOPHER E	
Hartford, CT 06	5103		ART UNIT	PAPER NUMBER
			3992	
			NOTIFICATION DATE	DELIVERY MODE
			NOTIFICATION DATE	DELIVERT MODE
			08/25/2020	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

usptopatentmail@cantorcolburn.com

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte JOHN A. SIEMON, RANDY J. BELOW, BRIAN CELELLA, JAMES A. FREY, MAXWELL K. YIP, VINICIO CRUDELE, JOSEPH M. FAVALE, and MARC J. PARDEE

> Appeal 2020-005518 Patent 7,980,899 B2 Application 13/944,262 Technology Center 3900

Before ALLEN R. MacDONALD, ERIC B. CHEN, and MICHAEL J. ENGLE, *Administrative Patent Judges*.

ENGLE, Administrative Patent Judge.

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellant¹ appeals under 35 U.S.C. § 134(a) from the Examiner's rejection of claims 1, 2, 5–10, and 13–16, which are all of the claims pending in the application. Claims 3, 4, 11, 12, and 17–41 have been canceled.² We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

¹ We use the word "Appellant" to refer to "applicant" as defined in 37 C.F.R. § 1.42(a). Appellant identifies the Siemon Company as the real party in interest. Appeal Br. 1.

² Appellant misstates that claim 2 has been cancelled. Appeal Br. 1.

TECHNOLOGY

The application relates to a "telecommunications connector having reduced termination variability to improve performance (e.g., crosstalk reduction) of the mated connectors." U.S. Patent No. 7,980,899 B2 at 2:1–4.

ILLUSTRATIVE CLAIM

Claim 1 is illustrative and reproduced below:

- 1. A telecommunications connector assembly comprising:
- a cable having a first pair of twisted wires and a second pair of twisted wires;
- a first connector having a first substrate having a first termination area, the first pair of twisted wires provided for electrical termination on a first side of the first substrate, the second pair of twisted wires provided for electrical termination on a second side of the first substrate, the second side of the first substrate opposite the first side of the first substrate;
- a second connector having a second substrate having a second termination area, the second pair of twisted wires provided for electrical termination on the second substrate, the first pair of twisted wires provided for electrical termination on the second substrate;

wherein the first pair of twisted wires is provided for electrical termination on the first substrate at insulation displacement contacts;

wherein the first connector is a first plug and the second connector is a second plug;

the first connector further comprising first plug contacts installed in the first substrate, the first plug contacts engaging outlet contacts upon the first plug mating with a modular jack;

wherein the insulation displacement contacts are positioned in first plated through holes on the first substrate and

> the first plug contacts are positioned in second plated through holes on the first substrate;

> wherein the first plug is an RJ-45 type plug and the second plug is an RJ-45 type plug;

wherein the first plug includes a first plug housing having slots therein, the first plug contacts extending through the slots in the first plug housing.

REFERENCE

The Examiner relies on the following prior art references:

Name	Number	Date
Crudele	US 2004/0116081 A1	June 17, 2004
Hackman	US 7,223,915 B2	May 29, 2007
Herman	US 5,741,155	Apr. 21, 1998
Smith	US 5,608,757	Mar. 4, 1997
Su	US 5,905,637	May 18, 1999

REJECTIONS

Claims 1, 2, 5–10, and 13–16 stand rejected under 35 U.S.C. § 251 based on a defective reissue declaration. Final Act. 3.

Claims 1, 2, 5–9, and 13 stand rejected under 35 U.S.C. § 103 as obvious over Hackman and Su. Final Act. 3.

Claims 10 and 16 stand rejected under 35 U.S.C. § 103 as obvious over Hackman, Su, and Crudele. Final Act. 7.

Claim 14 stands rejected under 35 U.S.C. § 103 as obvious over Hackman, Su, and Herman. Final Act. 9.

Claim 15 stands rejected under 35 U.S.C. § 103 as obvious over Hackman, Su, and Smith. Final Act. 9.

ANALYSIS

§ 251

"Appellant does not present any argument in the appeal brief on the rejection . . . under 35 U.S.C. § 251 as being based upon a defective reissue declaration." Ans. 4.

Accordingly, we sustain the Examiner's rejection of claims 1, 2, 5–10, and 13–16 under § 251.

§ 103

Appellant makes four arguments against the Examiner's rejection under § 103. First, Appellant argues:

Hackman is specifically concerned with the size of the connector and cable terminations.... The proposed modification of Hackman with the disclosure of Su... would greatly expand the height of the connectors 102 and 104, contrary to Hackman's objective of providing a compact connector. This proposed modification renders Hackman unsatisfactory for [its] intended purpose.

Appeal Br. 9.

However, we agree with the Examiner that "Appellant fails to show any evidence why the placement of the wire terminal 24 in Fig. 3 of Su on the circuit boards 132 and 146 in Fig. 1 of Hackman would expand the height of connectors 102 and 104 in Fig. 1 of Hackman." Ans. 7–8. We similarly agree with the Examiner that Appellant fails to show that a compact connector is Hackman's "intended purpose," rather than other purposes such as "devising a wire management configuration to make the wires easily align with the signal contacts of the opposing circuit boards for reducing the need to manipulate and rearrange the wires at the opposite end

of the cable" at the time of manufacture. *Id.* at 7; *see also* Hackman 1:34–37 ("Rearranging the wires increases the manufacturing time and complexity").

Second, the Examiner determines that it would have been obvious to combine Su and Hackman "for the advantage of allowing the positions of the electrical wires of the signal line to be conveniently interchanged." Final Act. 5 (citing Su 1:41–44). Appellant argues that "the statement of the motivation to combine Hackman and Su . . . is directly contrary to the teachings of Hackman" because "Hackman states that rearranging wires is to be **avoided**." Appeal Br. 10 (citing Hackman 1:34–37). However, we agree with the Examiner that

Su's motivational feature for combining Hackman with Su (i.e., interchangeable connections of the arranged electrical wires) does not teach away from the Hackman's key feature of wire management configuration to make the wires easily align with the signal contacts of the opposing circuit boards for reducing the need to manipulate and rearrange the wires at the opposite end of the cable because Su provides an advantage of allowing the positions of the [well-arranged] electrical wires of the signal line to be conveniently interchanged [for a different signal connection], for example.

Ans. 9 (brackets in original). Thus, the Examiner finds that Su helps alleviate some of the rearrangement concerns identified in Hackman.

Third, Appellant argues that "the proposed modification to Hackman (i.e., using the terminals 23 extending [through] slots 12 of Su) would render the connector of Hackman unable to mate with an intended receptacle." Appeal Br. 11. However, the Examiner correctly notes that "the proposed modification . . . renders the terminals . . . able to mate with a modular jack in Fig. 1 of Su." Ans. 11. As the Federal Circuit has explained, "one of ordinary skill would have been motivated to pursue the desirable properties

taught by [one prior art reference], even if that meant foregoing the benefit taught by [another prior art reference]." *In re Urbanski*, 809 F.3d 1237, 1244 (Fed. Cir. 2016).

Fourth, Appellant argues that "[i]f Hackman is modified to use the wire termination of Su, then the wire termination will all be on one side of the circuit board, rather than on two sides as recited in pending claim 1." Appeal Br. 11. In particular, claim 1 recites "a first substrate" and "the first pair of twisted wires provided for electrical termination on a first side of the first substrate, the second pair of twisted wires provided for electrical termination on a second side of the first substrate, the second side of the first substrate *opposite* the first side of the first substrate." However, Appellant fails to address sufficiently the Examiner's determination that "the primary reference Hackman alone teaches the argued limitation," including "termination on a first side of the first substrate (i.e., differential pair 160 of the wire pair #1 and #2 is on top signal layer 164 in Fig. 3 . . .)" and "termination on a second side of the first substrate (i.e., differential pair 160 of the wire pair #3 and #4 is on bottom signal layer 166 in Fig. 4...)." Ans. 12. The Examiner finds these top and bottom connections would still remain even after modifying with Su's insulation displacement contacts. *Id.* Appellant has not sufficiently addressed these determinations by the Examiner.

Accordingly, we sustain the Examiner's rejection of claim 1, and claims 2, 5–10, and 13–16, which Appellant argues are patentable for similar reasons. *See* Appeal Br. 11–12; 37 C.F.R. § 41.37(c)(1)(iv).

OUTCOME

The following table summarizes the outcome of each rejection:

Claims Rejected	35 U.S.C. §	Reference(s)/Basis	Affirmed	Reversed
1, 2, 5–10,	§ 251	Defective declaration	1, 2, 5–10,	
13–16			13–16	
1, 2, 5–9, 13	§ 103	Hackman, Su	1, 2, 5–9, 13	
10, 16	§ 103	Hackman, Su, Crudele	10, 16	
14	§ 103	Hackman, Su, Herman	14	
15	§ 103	Hackman, Su, Smith	15	
Overall			1, 2, 5–10,	
Outcome			13–16	

TIME TO RESPOND

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. $\S 1.136(a)$. See 37 C.F.R. $\S 1.36(a)(1)(iv)$.

AFFIRMED